

Topic/Objectives: 6-1 Wave Energy and Motion; (1) Use mathematical calculations as you analyze the characteristics of waves; (2) Determine the factors that influence wave height and wave speed

Name:

Date:

Period:

Essential Question: How is energy utilized in the formation and propagation of waves?

Questions:

Notes:

Wave Formation

- Waves are started by disturbances called _____.
- Three common wave generating forces are _____, _____, and _____.

When the seafloor is disturbed during an earthquake, a large amount of water is displaced.

- Waves move away from the source of the _____.
- Large waves that are produced by earthquakes are called _____.

When landslides occur or ice breaks off glaciers and material falls into the ocean, _____ are created.

- Some factors that influence the formation of waves include wind speeds, wind duration, water depth, and _____.
- _____ is the amount of open water a wind blows over.

Waves are the result of _____ blowing over the water's surface.

- The size of waves depends on how _____ and _____ the wind blows.
- _____, or ripples, are the smallest of the wind driven waves.
- After the waves have moved away from the wind or storm that formed them, they settle into _____.
- _____ are evenly spaced waves with smooth rounded crests and troughs that carry energy long distances across ocean basins.

Wave Height

- Wave height is dependent on three factors: wind speed, fetch, and wind duration. The largest waves occur when all three of these factors are _____.
- The largest waves in the world occur between _____ and _____.

Wave Dissipation

- Wave energy is _____ when water particles stop moving because of restoring forces.
- A _____ is a force that causes the water surface to go back to its undisturbed state.
- There are only two restoring forces— _____ and _____.

Wave Energy and Motion

